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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,656	02/25/2004	Jack Nilsson	200106.6	2915

21324 7590 06/28/2005

HAHN LOESER & PARKS, LLP  
One GOJO Plaza  
Suite 300  
AKRON, OH 44311-1076

EXAMINER

CABUCOS, MARIE G

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/786,656

Applicant(s)

NILSSON, JACK

Examiner

Marie Antoinette Cabucos

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 24-32 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-23 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8, 9 and 11 is/are rejected:
- 7) ☒ Claim(s) 4, 5, 7, 10 and 12-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/21/2004</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-23, drawn to multi-polarized forward feed and dish configuration, classified in class 343, subclass 773.
  - II. Claims 24-32, drawn to multi-polarized forward feed and two reflector dish configuration, classified in class 343, subclass 776.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as having a two-port power divider and in addition invention II having a second conductive reflector dish.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant's response filed on May 31, 2005 an election was made with traverse to prosecute Invention I, claims 1-23. Claims 24-32 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant's traverse alleging that inventions I and II are not distinct from each other, because they both contain "a multi-polarized forward feed used in conjunction

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with a conductive reflector dish with a focal point", has not been found persuasive. It remains the examiner's position that these inventions are related as subcombinations usable together given the extensive details found in invention II and not shared in invention I. Likewise, each subcombinations with its unique claimed structure would appear to serve a separate utility not shared by their mutual exclusive details.

Applicant's election with traverse of invention I, CLAIMS 1-23 in the reply filed on May 31, 2005 is acknowledged. The traversal is on the ground(s) that inventions I and II are not distinct from each other, because they both contain "a multi-polarized forward feed used in conjunction with a conductive reflector dish with a focal point". This is not found persuasive because inventions I and II are related as subcombinations usable together given the extensive details found in invention II and not shared in invention I.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6, 8, 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by McCorkle (5,880,699).

Claims 1, 8, 9 and 11, McCorkle discloses a dish antenna comprising a reflector dish (20) and a linear feed element (11, 10) each having a first end and a second end,

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and wherein said second ends are electrically connected at an apex point (12) and are disposed outwardly away from said apex point (12) toward said vertex point at an acute angle relative to an imaginary plane intersecting said apex point. (Refer to figure 1 of the prior art.)

3. Claims 2, 3 and 6, McCorkle further discloses of a ground reference located to a side of said imaginary plane that is away from said apex point (12) and being electrically isolated from feed elements as seen in figure 3 of the prior art.

***Allowable Subject Matter***

4. Claims 4, 5, 7, 10 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 4 and 5, limitation of feed element further comprising a dielectric material serving to mechanically connect, at least in part, the feed elements to said ground reference while electrically insulating said radiative members from said ground reference.

5. Claim 7, limitation of feed element wherein said ground plane comprises a circular conductive ground plane having a radius of at least 1/4 wavelength of a tuned radio frequency.

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6. Claim 10, limitation of antenna dish configuration further comprising a mounting mechanism to allow mounting of said feed element at said focal point.
7. Claim 12, limitation of feed element further comprising a truncated pyramidal conductor that includes a closed truncated side, an open base side, and three closed trapezoidal sides, and wherein an open interior space of said truncated pyramidal conductor encompasses said radiative members such that said apex point is approximately at a center point of said closed truncated side and said radiative members are disposed outwardly away from said closed truncated side toward said open base side.
8. Claims 16- 23 are allowed.

The following is an examiner's statement of reasons for allowance:

Limitation of forward feed of a reflector dish configuration comprising a truncated pyramidal conductor that includes a closed truncated side, an open base side, and three closed trapezoidal sides, and wherein an open interior space of said truncated pyramidal conductor encompasses said radiative members such that said apex point is approximately at a center point of said closed truncated side and said radiative members are disposed outwardly away from said closed truncated side toward said open base side.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent of Sharman (6,522,305) teaches a similar device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie Antoinette Cabucos whose telephone number is 571-272-8582. The examiner can normally be reached on 8:30-5:00.

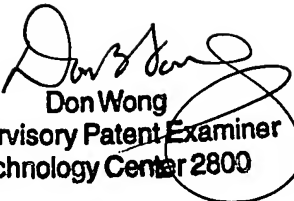
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marie Antoinette Cabucos  
6/23/2005

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Don Wong  
Supervisory Patent Examiner  
Technology Center 2800